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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,185	07/21/2004	Sung-Cheol Yoon	YOM-0098	5544

23413 7590 04/19/2007  
CANTOR COLBURN, LLP  
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BLOOMFIELD, CT 06002

EXAMINER
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CHEUNG, WILLIAM K

ART UNIT	PAPER NUMBER
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1713

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/502,185

Applicant(s)

YOON ET AL.

Examiner

William K. Cheung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 1/22/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,6,8,10-14 and 16-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,6,8,10-14 and 16-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. In view of amendment filed January 22, 2007, claims 31-34 have been cancelled.

Claims 1, 6, 8, 10-14, 16-30 are pending.

2. In view of argument filed January 22, 2007, the rejection of claims 1, 6, 8, 10-14, 16-30 under 35 U.S.C. 102(b) as being anticipated by Lipian et al. (US 6,455,650), is withdrawn.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1, 6, 8, 10-14, 16-19, 25-30 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lipian et al. (US 6,455,650).

Lipian et al. (col. 112-3, claims 1 and 2; col. 115-116, claims 16 and 17; col. 40, line 19-59) disclose a method for preparing a cycloolefin polymer that is substantially identical to applicants' claims 1, 6, 8, 10-14, 16-19, 25-30. Lipian et al. (col. 29, line 45 to col. 32, line 23) clearly disclose cycloolefin polymer having a structure VII (col. 30, line 12-19) having at least one polar functional group as claimed (col. 30, line 62-67).

Lipian et al. (col. 78-79, examples 160-163) clearly disclose a precatalyst comprising two different cocatalysts. Regarding claim 25, Lipian et al. (col. 21, line 16-20) clearly disclose the precatalyst as claimed. Regarding claim 26, Lipian et al. (col. 128, line 46) clearly disclose the cocatalyst as claimed. Regarding claim 27, Lipian et al. (col. 26, line 57-59; col. 130, line 19-22) clearly disclose the cocatalyst as claimed. Regarding claim 28, Lipian et al. (col. 30, line 62 to col. 32, line 55; particularly col. 30, line 62-67) clearly disclose monomers as claimed.

In working examples of Lipian et al. (col. 49-74, examples 23-25, 28-31, 34, 37, 39, 42, 44-47, 51, 53, 58-76, 84, 88, 89, 95, 98, 102, 105, 107, 110-112, 115-117, 123-125, 129, 132, 139) clearly disclose processes characterized with a product yield of greater than 50 wt% or more based on the total weight of the monomer. It would not be difficult to one of ordinary skill in art to recognize that it is desirable to obtain a process capable of producing a product yield of greater than 50 wt% or more.

In view of the reasons set forth above, although Lipian et al. do not contain a working example using the claimed catalyst for polymerizing the disclosed monomers at a product yield of greater than 50 wt%, Lipian et al. still have clearly disclosed the catalyst and the monomers as claimed.

Therefore, in view of the substantially identical catalyst and monomer disclosed in Lipian et al. and as claimed, the examiner has a reasonable basis that the claimed

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“product yield of greater than 50 wt%” is inherently possessed in Lipian et al. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

Further, motivated by the expectation of success that a product yield of greater than 50 wt% can be obtained as demonstrated by some of the working examples in Lipian et al. (col. 49-74, examples 23-25, 28-31, 34, 37, 39, 42, 44-47, 51, 53, 58-76, 84, 88, 89, 95, 98, 102, 105, 107, 110-112, 115-117, 123-125, 129 132, 139), it would have been obvious to one of ordinary skill in art to perform the polymerization process of Lipian et al. with the disclosed catalyst and monomers accordingly to obtain a yield of 50 wt% feature as claimed.

6. Claims 20-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lipian et al. (US 6,455,650).

In view of paragraph 5 of instant office action, Lipian et al. clearly disclose the cycloolefin polymers used in the optical anisotropic film of claims 20-24.

Regarding the claimed optical anisotropic film, Lipian et al. (col. 43, line 56 to col. 44, line 6) disclose the various applications where good optical properties are required.

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Of the applications listed, optical film is cleared taught (col. 44, line 2). Regarding claim 24 which claims a display device, the examiner believe that the claimed "display device" is inherently possessed in Lipian et al. because windows (col. 44, line 4) can be viewed as a display device or part of a display device.

Regarding the claimed retardation value, molecular weight, and refractive indexes, the examiner has a reasonable basis to believe that these properties are inherently possessed in Lipian et al. in view of the substantially composition and process of polymer prepared in Lipian et al. and the composition and process of claims 1-19. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

Regarding claim 23 which claims that the optical film is used as a negative C-plate type optical compensation film for liquid crystal displays, applicants must recognize that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K. Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William K. Cheung, Ph. D.

Primary Examiner

April 14, 2007

**WILLIAM K. CHEUNG  
PRIMARY EXAMINER**